NWS FORM E-5 (11-88)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	HYDROLOGIC SERVICE AREA (HSA)	
(PRES. BY WSOM E-41)	NATIONAL WEATHER SERVICE	WFO Jackson, Mississippi	
MONTHLY R	EPORT OF RIVER AND FLOOD CONDITIONS	REPORT FOR: MONTH YEAR January 2003	
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan Gerard, MIC In Charge of HSA DATE February 11th . 2003	

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

Synopsis...

January was vastly different from the previous 3 months. The northern jet stream prevailed over the HSA during the month bringing with it much colder and drier weather.

A cold front and an associated low pressure moved through the area from the last day of December into the morning of the New Year. 24 hour rainfall reports ending at 7am on New Years day ranged from less than .25 inches to near 3 inches at Brooksville, MS.

A series of cold Fronts pushed through the area around the $2^{\rm nd}$, $10^{\rm th}$, $16^{\rm th}$, $23^{\rm rd}$, $25^{\rm th}$ and $26^{\rm th}$, and $31{\rm st}$. Precipitation amounts were generally light with the passage of these fronts, mainly .50 inches or less. Some light frozen precipitation (snow flurries or sleet) occurred in some areas of the HSA around the $12^{\rm th}$, $16^{\rm th}$ and the $23^{\rm rd}$.

The most significant rainfall event occurred during the final several days of the month. A very slow moving cold front pushed across the area from the 29th to the 30th. Rainfall amounts ranged from around .25 inches to about 2.50 inches. Heaviest storm total rainfall occurred at the following locations: Paulding, MS 2.40 inches, Raleigh, MS 2.25 inches, Goshen Springs, MS 2.17 inches, Dlo, MS 2.13 inches, Collinsville, MS 1.98 inches and Crystal Springs Agricultural Center in Copiah County, MS 1.83 inches.

River and Soil Conditions...

Rainfall for the month was well below normal over the entire HSA. If not for the rainfall near the end of the month, January 2003 would have gone into the record books as the driest January on record for many locations. The dry conditions during the month allowed soil moisture to return to near normal conditions. Minor flooding, mainly from late December rainfall, occurred early in the month along the Big Black, Big Sunflower, Pearl, and the Yalobusha Rivers. Rainfall during the last several days of the month once again pushed portions of the Big Black and the Yalobusha back above flood stage. With normal to above normal rainfall expected especially over southern sections of the HSA, flood potential for HSA rivers should remain normal to slightly above normal. See the January E-3 report for information on flood crests.

RIVER BASIN	<u>RAINFALL</u>	DEPARTURE FROM NORMS		
Southeast Arkansas (Chicot & Ashley counties)	0.50 to 1.25 inches	Much below normal.		
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower	0.50 to 1.25 inches northern sections	Much below normal.		
Ouachita)	1.25 to 2.75 inches central sections	Much below normal.		
	1.75 to 2.50 inches southern section	Much below normal		
Lower Yazoo	0.75 to 3.00 inches	Much below normal.		
Big Black	3.00 to 3.75 inches upper section	Much below normal.		
	1.50 to 2.75 inches lower and middle sections	Much below normal.		
Homochitto/ Bayou Pierre	1.50 to 2.25 inches	Much below normal.		
Pearl (abv Jackson)	1.75 to 2.50 inches	Much below normal.		
Pearl (Blo Jackson)	1.50 to 3.50 inches	Much below normal.		
Pascagoula	1.00 to 3.00 inches over the Leaf basin.	Much below normal.		
	1.50 to 2.00 inches over the Black Creek basin.	Much below normal.		
	1.75 to 3.25 inches over the Chickasawhay	Much below normal.		
Tombigbee tributaries in the JAN HSA	1.50 to 4.75 inches	Below to much below normal.		

The heaviest rainfall amounts in the HSA for the month were: 4.76 inches at Brooksville, MS; 3.86 inches at Tibbee, MS; 3.76 inches at Vaiden, MS; 3.48 inches at Eupora, MS; 3.32 inches at Shubuta, MS; 3.10 inches at Macon, MS; 3.05 inches at Starkeville, MS.

Here at the Jackson WFO, the January monthly rainfall was 1.26 inches, which was 4.41 inches below normal. Rainfall over the last several days of the month kept January 2003 from being the driest on record.

At the Meridian Airport, the January monthly rainfall was 1.58 inches, which was 4.34 inches below normal.

Mississippi River...

The Mississippi River from Arkansas City, AR to Natchez, MS began the month above seasonal norms; however by the end of the month, these points were all well below seasonal norms.

The provisional high and low stages for January are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	22.36	01/01	2.99	01/31
Greenville, MS	33.90	01/01	14.41	01/31
Vicksburg, MS	30.30	01/01	9.10	01/31
Natchez, MS	38.40	01/01	17.22	01/30

Products issued...

Total Flood Warning products issued: 3

Total Flood Statement products issued: 83

Daily Rainfall Products (RRA'S) issued 31

Daily River Forecast Products (RVS'S) issued 31

Daily River Stage products (RVA'S) issued 31

Marty V. Pope Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District

USGS Ruston District

USCE Mobile District

USCE Vicksburg District

USCE Mississippi Valley Division

USGS Mississippi District

SRH Climate, Weather and Water Division

LMRFC

Pearl River Valley Water Supply District

Hydrologic Information Center

Southern Region Climate Center

Pat Harrison Waterway District